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ABSTRACT

This report presents the findings of a Fast Response Survey System (FRSS) survey of 2,874 colleges on remedial/developmental programs offered during fall 1989. The survey provides national estimates on the following factors: institutions that offered remedial courses; reading, writing, and mathematics remedial courses offered; students enrolled in and passing remedial courses; and faculty teaching remedial courses. It also provides information on characteristics of remedial courses and programs. Data for all institutions are presented by control (public and private), type (2-year and 4-year), geographic region (Northeast, Central, Southeast, and West), enrollment size of institution (less than 1,000; 1,000 to 4,999; and 5,000 or more) and minority status (student body less than 50% white and student body greater than or equal to 50% white). Some of the characteristics are interrelated particularly along the lines of type and control. Survey findings in this report are organized into three main sections. The first section discusses the number of institutions, courses, freshmen, and teachers involved in college-level remedial education; the second describes remedial courses and programs; the third compares data from this survey to data from the 1983-84 survey on this topic. Numerous tables and figures display the data. The report includes a copy of the instrument used. (JB)

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Survey Report

May 1991

College-Level Remedial Education in the Fall of 1989

Contractor Report

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NATIONAL CENTER FOR EDUCATION STATISTICS

Survey Report May 1991

College-Level Remedial Education in the Fall of 1989

Contractor Report

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May 1991

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Highlights

- Three out of four colleges and universities offered at least one remedial course in fall 1989. Sixty-eight percent offered mathematics, 65 percent writing, and 58 percent reading.
- Both in institutions with a predominantly minority student body (less than 50 percent white) and institutions with a predominantly nonminority student body (greater than or equal to 50 percent white), 74 percent of the institutions offered at least one remedial course.
- At least one remedial course was offered in 91 percent of public colleges, 90 percent of 2-year colleges, 64 percent of 4-year colleges, and 58 percent of private colleges.
- On average, colleges with remedial courses provided two different courses in a given remedial subject; on average, 15 people per college taught one or more remedial courses in fall 1989.
- Thirty percent of all college freshmen took at least one remedial course in fall 1989. Twenty-one percent took mathematics, 16 percent writing, and 13 percent reading.
- At institutions with a predominantly minority student body, 55 percent of freshmen enrolled in at least one remedial course; at institutions with a predominantly nonminority student body, 27 percent of freshmen enrolled in at least one remedial course.
- Approximately 17 percent of institutions were unable to provide enrollment data for freshmen in remedial courses. About 30 percent of institutions that provided remedial course enrollment data were unable to provide racial/ethnic breakdowns.
- Remedial courses were passed by 77 percent of those taking remedial reading, 73 percent taking remedial writing, and 67 percent taking remedial mathematics.
- Approximately one-fourth of institutions were unable to provide passing rates for freshmen in remedial courses, and about one-half were unable to provide passing rates by racial/ethnic breakdowns.
- About 20 percent of colleges offering remedial education had a separate remedial department or division; 98 percent offered at least one support service, such as peer tutoring and counseling; and 97 percent of institutions conducted at least one evaluation of remedial programs, such as reviewing student completion rates of remedial courses.
- Approximately 20 percent of colleges awarded degree credit for remedial courses. About two-thirds awarded institutional credit, which counted in determining full-time status but not toward degree completion. One-tenth awarded no credit at all for such courses.

- Remedial courses were required for students not meeting institutional standards in 68 percent of colleges offering remedial writing, 63 percent offering remedial mathematics, and 54 percent offering remedial reading.

- About 90 percent of institutions providing remedial courses used placement tests to select participants for remedial courses; remedial-course exit skills were based on regular academic-course entry skills by 86 percent of institutions for remedial mathematics courses, by 81 percent for remedial writing courses, and by 70 percent for remedial reading courses.

- One-third of colleges providing remedial education allowed students to take any regular academic courses while taking remedial courses; in only 2 percent could students take no regular academic courses while taking remedial courses.

- Forty percent of colleges providing remedial courses were not engaged in any activities to reduce the need for remedial education. Fifty-four percent communicated with high schools about skills needed for college work, and 19 percent participated in or organized workshops for high school faculty.

- Forty-seven percent of institutions were unable to provide retention rates to the second year for freshmen who had enrolled in at least one remedial course, and approximately 66 percent of institutions were unable to provide these rates by race/ethnicity.

- Eighty-one percent of colleges did not maintain baccalaureate degree graduation rates for entering freshmen who enrolled in at least one remedial course, and 87 percent did not maintain graduation rates by racial/ethnic group for these students.

- Institutions offering one or more remedial courses in reading, writing, or mathematics decreased from 82 percent in 1983-84 to 74 percent in 1989-90.

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Background

Remedial education has been an enduring, integral part of higher education, as has the concern about the place of remediation in college-level education. That concern has led to a long-standing debate which encompasses issues of equity--providing adequate preparation for a diverse student population--and issues of quality--ensuring high standards at colleges and universities.

As early as the late 1800s, colleges and universities in America operated programs to prepare students for undergraduate work. Often, however, the students enrolled in such preparatory programs were barely teenagers. Therefore, they did not have the same number of years of elementary and secondary school education as today's college-level remedial students. Over 40 percent of entering students in colleges in the United States in 1894 were preparatory students.[1] Preparatory programs were considered pre-college and generally were found at 2-year colleges from the 1920s until the late 1960s.

In the 1970s, remedial education at 2-year and 4-year colleges became more common in response to changing enrollment patterns of entering freshmen, declining high school achievement levels, and adoption of open admission standards on the part of many institutions. The state of remedial education in higher education institutions as the 1990s begin is the topic of this report.

This report presents the findings of a Fast Response Survey System (FRSS) survey of colleges on remedial/developmental programs offered during fall 1989. The survey was conducted to meet the need for information at the national level on the extent of remedial education and the characteristics of remedial programs. The survey provides national estimates on the following:

- Institutions that offered remedial courses;
- Reading, writing, and mathematics remedial courses offered;
- Students enrolled in and passing remedial courses; and
- Faculty teaching remedial courses.

It also provides information on characteristics of remedial courses and programs, such as the type of credit given, requirement status, use of placement tests, most frequent provider of remedial education, evaluations conducted, support services offered, activities engaged in to reduce the need for remedial education, and maintenance of retention and baccalaureate degree graduation rates for students who enrolled in remedial courses.

This study provides the first data collected at the national level since a 1983-84 FRSS survey on the same topic. In addition to updating the national picture of college remedial education, the current survey attempted to furnish estimates of racial/ethnic participation

[1] Arthur Levine, Handbook on Undergraduate Curriculum. San Francisco: Jossey-Bass, 1978.

in remedial education in order to determine the extent of remedial education provided to minority students by higher education institutions. Racial/ethnic breakdowns are not reported, however, because the percentage of institutions that maintained and could provide these data was too low to serve as the basis for the computation of national estimates.

The survey first asked whether institutions offered a remedial course in reading, writing, or mathematics. "Remedial studies," for the purposes of this study, were defined as any program, course, or other activity (in the area of reading, writing, or mathematics) for students lacking those skills necessary to perform college-level work at the level required by the institution. Throughout the questionnaire, these activities were referred to as "remedial/ developmental." However, respondents were asked to include any activity meeting the definition, regardless of name. Colleges may have used one of a variety of names such as compensatory and basic skills, all of which meet the definition for remedial studies.

The report presents all of the data for all institutions, by control (public and private), type (2-year and 4-year), geographic region (Northeast, Central, Southeast, and West), enrollment size of institution (less than 1,000; 1,000 to 4,999; and 5,000 or more) and minority status (student body less than 50 percent white and student body greater than or equal to 50 percent white). Some of the characteristics are interrelated. For example, only 22 percent of 2-year institutions are private, compared to 70 percent of 4-year institutions. Similar patterns generally emerge for public and 2-year colleges; likewise, private and 4-year colleges often have similar patterns.

Survey findings in this report are organized into three main sections. The first section discusses the number of institutions, courses, freshmen, and teachers involved in college-level remedial education; the second describes remedial courses and programs; the third compares data from this survey to data from the 1983-84 survey.

Participation in College-Level Remedial Education

Institutions Offering Remedial Courses

Institutions were asked whether they offered remedial courses in reading, writing, or mathematics. Three-fourths of colleges and universities reported offering remedial courses as part of their curricula in fall 1989 (table 1), and they varied greatly by institutional control, type, selectivity,[2] and size. By categories of institutions,[3] comparisons of those offering at least one remedial course in reading, writing, or mathematics were as follows:

- Ninety-one percent of public colleges versus 58 percent of private colleges;
- Ninety percent of two-year colleges versus 64 percent of 4-year colleges;
- Ninety-six percent of noncompetitive colleges; 73 percent of minimally difficult colleges, and 62 percent of moderately difficult colleges versus 32 percent[4] of very difficult colleges, and 27 percent* of most difficult colleges; and
- Eighty-seven percent of large colleges and 78 percent of medium-sized colleges versus 60 percent of small colleges.

These patterns in control, type, selectivity, and size for colleges offering at least one remedial course mirrored patterns for colleges offering remedial courses in the specific subjects of reading, writing, and mathematics. In remedial mathematics, 68 percent of institutions offered courses; in remedial writing, 65 percent; and in remedial reading, 58 percent.

Number of Remedial Courses

Colleges with remedial courses typically offered one or two separate courses in each subject in fall 1989 (table 1). For example, 38 percent of institutions offering courses in remedial mathematics had one course, 29 percent had two, 24 percent had three or four, and 9 percent had more than four. Similar patterns emerged for course offerings in remedial reading and writing (not shown in tables).

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[2]Colleges were classified based on the selectivity of their admission criteria according to Peterson's Guide to Four-Year Colleges, 1990 and Peterson's Guide to Two-Year Colleges, 1990. Classifications for 4-year colleges are defined as followed: *most difficult*, more than 75 percent of the freshmen were in the top 10 percent of their high school class and scored over 1,250 on the SAT or over 29 on the ACT, and about 30 percent or fewer of the applicants were accepted; *very difficult*, more than 50 percent of the freshmen were in the top 10 percent of their high school class and scored over 1,150 on the SAT or over 26 on the ACT, and about 60 percent or fewer of the applicants were accepted; *moderately difficult*, more than 75 percent of the freshmen were in the top half of their high school class and scored over 900 on the SAT or over 18 on the ACT, and about 85 percent or fewer of the applicants were accepted; *minimally difficult*, most freshmen were not in the top half of their high school class and scored somewhat below 900 on the SAT or below 19 on the ACT, and up to 95 percent of the applicants were accepted; *noncompetitive*, virtually all applicants were accepted regardless of high school rank or test scores.

[3]Because the estimates are based on a statistical sample, there may be differences between the responses of the sample and those that would result from a survey of the entire population. Standard errors for selected key statistics are included in table 19.

[4]Standard error is greater than or equal to 10 percent of the estimate. Throughout the remainder of this report, an asterisk (*) is used to indicate estimates that have large standard errors and, thus, should not be considered as highly precise. The standard errors for estimates with asterisks are greater than or equal to 10 percent of the estimate (table 19).

Those categories of institutions which most frequently provided remedial courses tended to offer slightly more of them. Public, 2-year, noncompetitive, and large colleges averaged about one and one-half more courses in each subject than did private, 4-year, moderately difficult, and small institutions. For example, the average number of remedial mathematics courses ranged from

- 3.0 courses in public colleges to 1.3 in private colleges;
- 3.0 courses in 2-year colleges to 1.7 in 4-year colleges;
- 3.1 courses in noncompetitive colleges to 1.6 in moderately difficult[5]; and
- 3.4 courses in large colleges to 1.2 in small colleges.

Freshman Enrollment in Remedial Courses

The survey sought information on the percentage of entering freshmen who were enrolled in remedial courses in reading, writing, and mathematics. Some institutions were unable to provide these figures and were reluctant to give estimates. As a result, nonresponse rates for freshman enrollment were about 17 percent (18 percent in reading, 18 percent in mathematics, and 16 percent in writing) (table 2).[6] Private institutions were more likely than public institutions to provide remedial course enrollment data. For writing courses, for instance, 5 percent of private institutions were unable to do so, compared to 21 percent of public institutions.

Of those institutions that were able to provide remedial course enrollment data, about 30 percent were unable to provide racial/ethnic breakdowns (32 percent for reading, 31 percent for mathematics, and 29 percent for writing) (table 2).

Thirty percent of all entering college freshmen enrolled in at least one remedial course in fall 1989[7] (table 3). Remedial courses in mathematics were taken by the most students (21 percent), followed by remedial courses in writing (16 percent), and remedial courses in reading (13 percent).

Freshman enrollment in remedial courses varied by institutional type and minority status of the student body. Specifically, the following statistically significant comparisons in the proportion of freshmen enrolled in remedial courses were found:

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[5]Because there were so few institutions receiving the more selective ratings, selectivity was not used in other analyses. Selectivity ratings are defined in footnote 2.

[6]See tables 17 and 18 for number and percentage of institutions in universe and in sample responding to survey and to enrollment items.

[7]The percentage of freshmen enrolled in remedial courses was calculated by dividing the sum of freshmen institutions taking remedial courses by the sum of freshmen at all institutions. Data were imputed for those institutions unable to report freshmen enrollment in remedial courses; see page 20 in the section on Survey Methodology and Reliability for a description of the imputation.

- Thirty-six percent at 2-year colleges versus 24 percent at 4-year colleges; and
- Fifty-five percent at colleges with a predominantly minority student body versus 27 percent at those with a predominantly nonminority student body.

These patterns emerged for enrollment in remedial reading, writing, and mathematics courses. Remedial enrollments in writing and mathematics were higher at public institutions (17 percent in writing and 23 percent in mathematics) than at private institutions (11 percent* in writing and 12 percent* in mathematics).

Freshmen Passing Remedial Courses

Two-thirds of the college freshmen who enrolled in remedial mathematics courses in fall 1989 passed at least one course (table 3). Seventy-seven percent passed courses in remedial reading, and 73 percent passed in remedial writing. These figures include imputations for data from about one-fourth of the institutions that offered remedial courses but were unable to provide passing rates.[8] Nonresponse rates for freshmen passing remedial courses ranged from 23 percent in remedial writing, to 25 percent in remedial mathematics, to 26 percent in remedial reading. Approximately half of the institutions were unable to provide passing rates by racial/ethnic breakdowns (table 4).

Freshmen in private or small institutions were more likely to pass remedial courses than those in public or large institutions. In remedial mathematics, for example, 80 percent of freshmen at private institutions passed; at public, 65 percent. In small institutions, 79 percent of freshmen enrolled in remedial mathematics passed; in large, 65 percent. In remedial reading, differences arose between 2-year and 4-year colleges, with 82 percent of freshmen in 4-year colleges and 73 percent in 2-year colleges passing.

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[8] See page 20 in the section on Survey Methodology and Reliability for a description of the imputation.

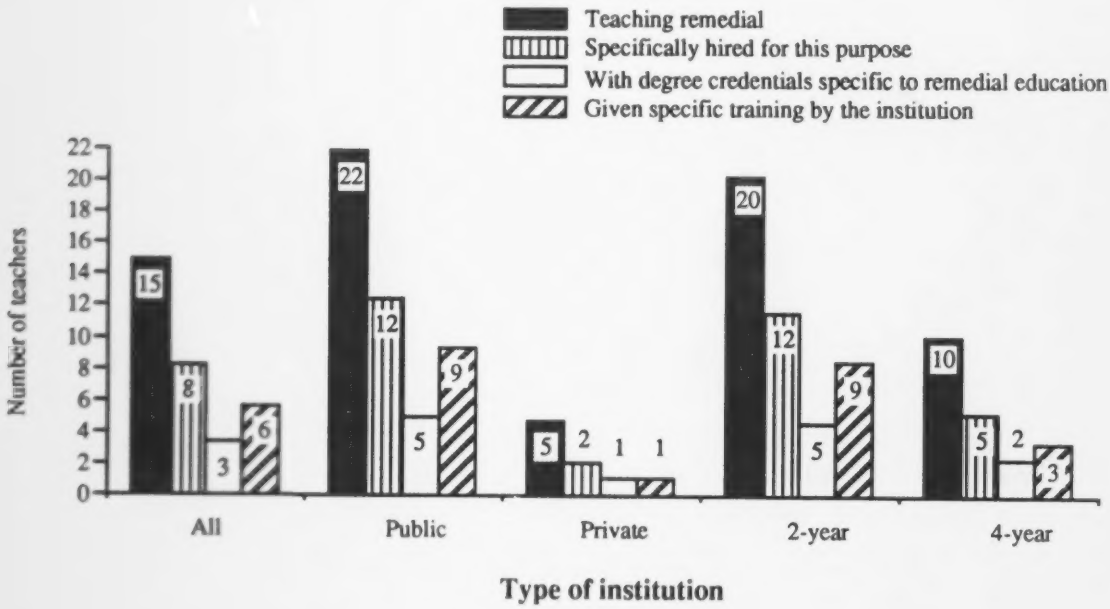
*Standard error is greater than or equal to 10 percent of the estimate (table 19).

Teachers of Remedial Courses

In fall 1989, a total of 30,650 persons taught remedial college courses--an average of 15 persons per institution that offered remedial courses (table 5). Forty-four percent of schools with remedial courses had 5 or fewer; 23 percent had 6 to 15; and 29 percent had 16 or more.[9] The average number of teachers varied by institutional size, control, and type. Small colleges averaged 3 persons; large, 33 persons. In institutions with remedial courses, an average of 5 persons taught remedial courses at private colleges, compared to 22 at public institutions. Four-year colleges averaged 10 persons; 2-year colleges averaged 20.

About 8 of the 15 persons per institution teaching remedial courses were specifically hired to do so. Almost 6* were given specific training by the institution, and about 3* had degree credentials specific to remedial education (figure 1).

Figure 1.-- Average number of persons at an institution teaching one or more remedial course in fall 1989, by type of institution: United States, 1989-90



Source: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

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[9]This item had a 4-percent nonresponse rate.

*Standard error is greater than or equal to 10 percent of the estimate (table 19).

Although the *number* of teachers with degree credentials specific to remedial education varied by size, control, and type of the institutions where they taught, the *percentage* of teachers with degrees in remedial education remained similar in all institutions: 23 to 26 percent. Wider ranges--and statistically significant differences--were found in the percentage of teachers specifically hired to teach remedial courses (45 percent at private colleges and 57 at public, for example), and the percentage given specific training by the institutions (19 percent at private institutions and 43 percent at public).

Characteristics of Remedial Courses and Programs

Type of Credit

Credit for remedial courses is an issue of considerable debate among educators. Some argue that awarding some form of credit is an incentive for completion of the course, while others believe credit for such courses represents a lowering of standards. In order to qualify for financial aid, students often must meet full-time enrollment status. To ensure full-time student status, institutions may grant "institutional credit" for remedial courses, which becomes part of a student's permanent college record but does not count toward degree completion.

The survey collected information on the most prevalent type of credit institutions award for each subject: no formal credit, institutional credit, degree credit toward elective requirements, or degree credit toward subject requirements. Institutional credit was the most frequent type of credit given for remedial courses in fall 1989. For example, of institutions offering remedial mathematics courses, 69 percent gave institutional credit (table 6). In contrast, only 20 percent awarded some degree credit (5 percent* for subject requirements and 15 percent* for elective requirements) for such remedial courses. The remaining 11 percent* gave no formal credit.

Although this pattern was similar for reading, writing, and mathematics, certain types of institutions were more likely to award institutional credit than others. For remedial math, for instance, 79 percent of public and 2-year colleges awarded institutional credit, as compared to 51 percent* of private and 60 percent of 4-year colleges.

Significant regional differences in Northeast institutions versus institutions in other areas also appeared. Institutional credit in remedial reading was given in 83 percent of colleges in the Southeast, 79 percent in the West, 64 percent in the Central region, and 39 percent in the Northeast. Institutions in the Northeast were more likely to give elective degree credit (32 percent*) or to give no formal credit (28 percent*) in remedial reading than institutions in the Southwest or West.

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*Standard error is greater than or equal to 10 percent of the estimate (table 19).

Requirement Status

Institutions were asked whether remedial courses for students needing remediation were most frequently required, recommended but not required, or voluntary. At least 50 percent of institutions offering remedial courses in fall 1989 most frequently required students needing remediation to take remedial courses (table 7). Such courses were voluntary at only 2 to 3 percent of institutions. At the remainder of institutions, remedial courses were recommended but not required. Remedial writing was required by 68 percent of institutions; remedial mathematics, by 63 percent; and remedial reading, by 54 percent (figure 2).

Requiring remedial courses was more common at 4-year colleges than 2-year colleges. For example, 74 percent of 4-year colleges required students needing remediation in mathematics to take a remedial mathematics course, while 51 percent of 2-year colleges did so. In contrast, recommending but not requiring remedial courses occurred more frequently in 2-year than 4-year colleges. For example, taking remedial mathematics courses was recommended by 48 percent of 2-year colleges and 23 percent* of 4-year colleges.

Entering and Exiting Remedial Courses

The survey asked institutions whether or not they used placement tests to select participants for remedial-courses in fall 1989. Ninety-four percent of colleges used placement tests for remedial writing, 93 percent for mathematics, and 88 percent for reading (table 8). The proportion of colleges and universities using placement tests was consistently high at all types of schools.

Institutions also noted whether or not they based remedial-course exit skills on regular academic-course entry skills. About 80 percent of institutions reported doing so in fall 1989--86 percent in remedial mathematics, 81 percent in remedial writing, and 70 percent in remedial reading.

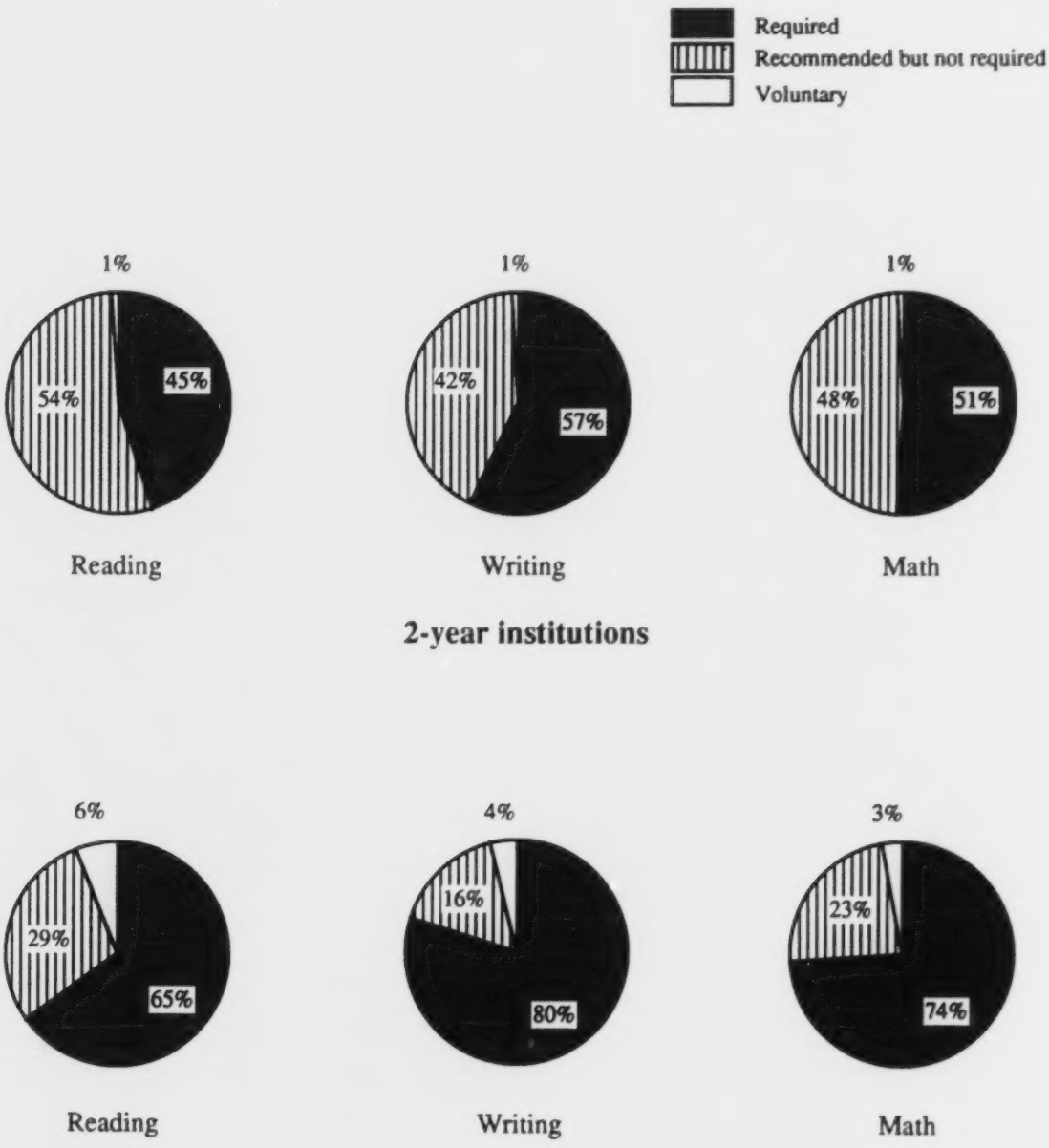
Taking Regular Academic Courses

Some institutions did not allow students to take regular academic courses until they had completed their remedial courses. Others permitted students in remedial courses to take any regular academic course. Still other institutions limited students in remedial courses to some regular academic courses. A student in remedial mathematics, for example, might not be able to take any regular mathematics courses, but could take regular English or history classes.

About two-thirds of institutions in fall 1989 allowed students to take some regular academic courses while taking remedial courses (table 9). The percentage with this policy ranged from 69 percent in mathematics, to 68 percent in writing, to 63 percent in reading. Almost no institutions (1 to 2 percent) entirely prohibited students who were enrolled in remedial courses from taking regular

*Standard error is greater than or equal to 10 percent of the estimate (table 19).

Figure 2.-- Percentage of 2-year and 4-year institutions with certain requirement status for remedial courses in reading, writing, and math: United States, 1989-90



Source: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

academic courses. The remaining one-third of institutions let students take any regular academic course while taking remedial courses.

Public colleges were more likely than private colleges to let students take some regular academic courses while taking remedial courses. These differences were statistically significant in remedial reading: 69 percent of public institutions let students take some regular academic course while taking remedial courses; the corresponding figure for private institutions was 49 percent*.

Providers of Remedial Education

The survey collected information on which administrative unit of the institution most frequently provides remedial/developmental education: separate remedial division/department, traditional academic departments, counseling/tutoring center, learning center, or other area. The traditional academic department was the most frequent provider of remedial education, with 69 percent of institutions offering remedial mathematics, 65 percent remedial writing, and 51 percent remedial reading in the respective academic department (table 10). However, 26 percent* of all institutions reported separate remedial departments or divisions in fall 1989 as the most frequent provider of remedial reading, 20 percent* for remedial writing, and 19 percent* for remedial mathematics.

Evaluating Remedial Programs

The survey asked institutions to rank in importance the principal types of evaluation they conduct of remedial programs. Institutions selected from a list consisting of the following:

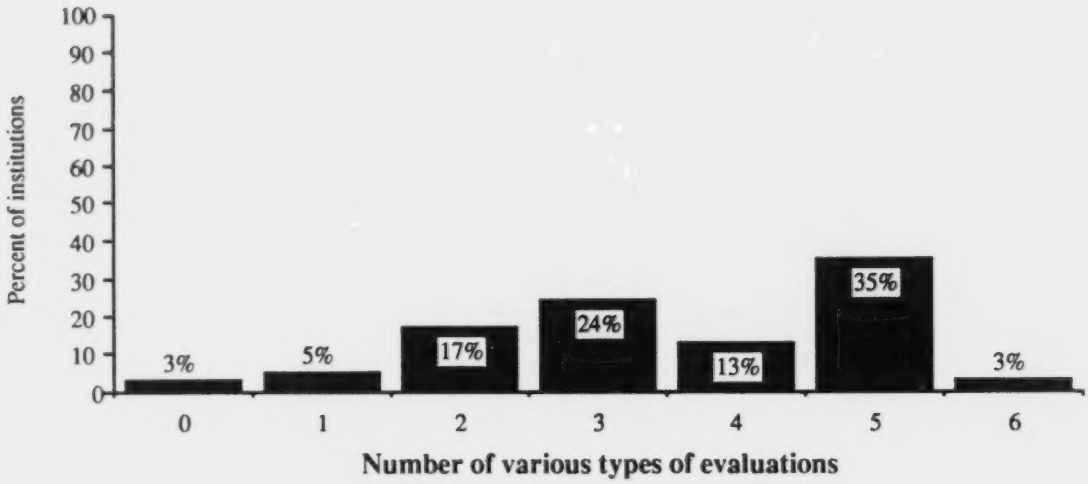
- Student evaluation of course or program;
- Instructor evaluation of course or program;
- Student completion rate or grade for course or program;
- Followup studies of grades at the next level of courses;
- Other followup studies of students' academic performance; and
- Other evaluations.

Institutions ranked only those evaluations which they conducted.

Almost all institutions conducted evaluations of remedial programs. Half of them used four or more different types of evaluations (figure 3). Student evaluations (80 percent of institutions), instructor evaluations (78 percent), and student completion rates (78 percent) were the most prevalent types of evaluation conducted (figure 4). Followup studies of grades and other followup studies were conducted by 65 and 54 percent respectively. Other types of

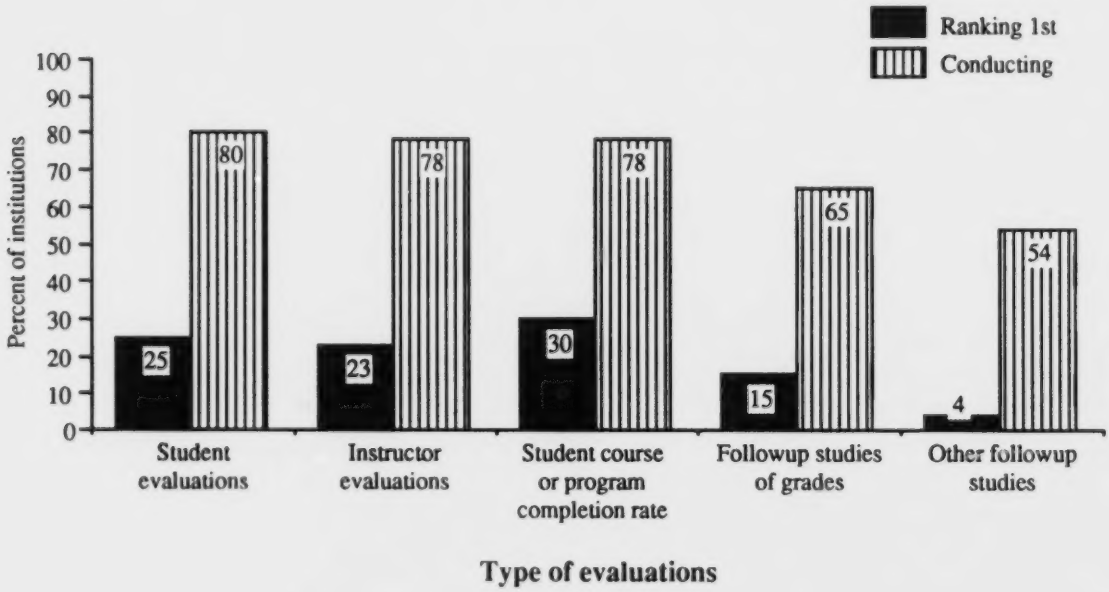
*Standard error is greater than or equal to 10 percent of the estimate (table 19).

Figure 3. -- Percentage of institutions conducting different numbers of various types of evaluations of remedial programs: United States, 1989-90



Source: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education National Center for Education Statistics, 1991 (survey conducted in 1990).

Figure 4.-- Percentage of institutions conducting and rating first in importance certain types of evaluations of remedial programs: United States, 1989-90



Source: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

evaluations were conducted by 6 percent of institutions. These included pre- and post-testing, as well as various other assessments of students.

Thirty percent* of institutions viewed studies of student completion rates for remedial courses or programs as the most important type of evaluation conducted (table 11). Student and instructor evaluations were ranked first by 25 percent* and 23 percent*, respectively.

Maintaining Records of Student Retention and Graduation Rates

One goal of the study was to compare retention rates to the second year for students enrolled in remedial courses with those for all freshmen. Too few institutions maintain these records, however, to provide valid national estimates. The item nonresponse rates for the percentage of all 1988-89 full-time entering freshmen who continued at an institution to the start of the second year was 27 percent. The nonresponse rate for the parallel item for freshmen who had enrolled in at least one remedial course was 47 percent. The nonresponse rates increased when institutions were asked to report these figures by racial/ethnic group--to about 51 percent for all freshmen, and to approximately 66 percent for freshmen who enrolled in at least one remedial course.

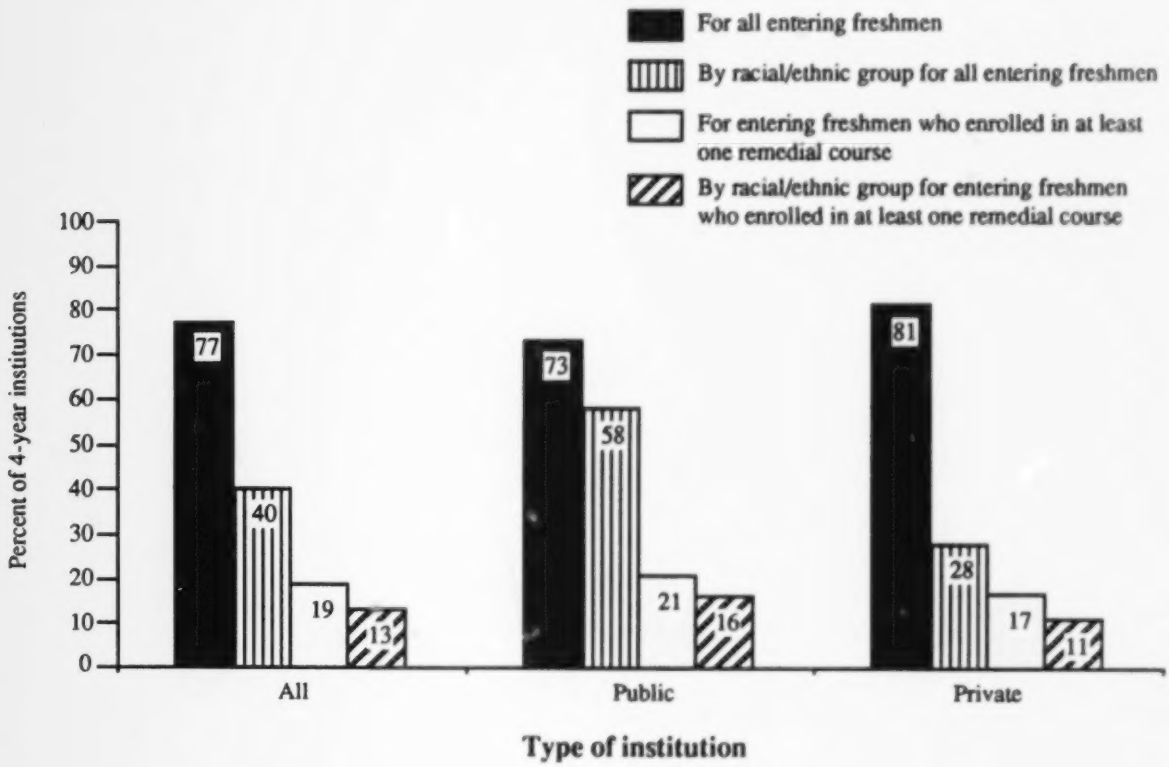
Seventy-seven percent of institutions in fall 1989 maintained baccalaureate-degree graduation rates for all freshmen, but only 40 percent maintained the rates by racial/ethnic group (table 12). Even fewer institutions could report baccalaureate-degree graduation rates for freshmen who had enrolled in at least one remedial course:

- Eighty-one percent* of institutions do not maintain these data for freshmen who enrolled in at least one remedial course; and
- Eighty-seven* percent of institutions do not maintain these data by racial/ethnic group for freshmen who enrolled in at least one remedial course.

The percentage of institutions maintaining graduation rates for students who had enrolled in at least one remedial course was uniformly low at all types of institutions (figure 5).

*Standard error is greater than or equal to 10 percent of the estimate (table 19).

Figure 5.-- Percentage of 4-year institutions maintaining baccalaureate degree graduation rates for certain types of freshmen: United States, 1989-90

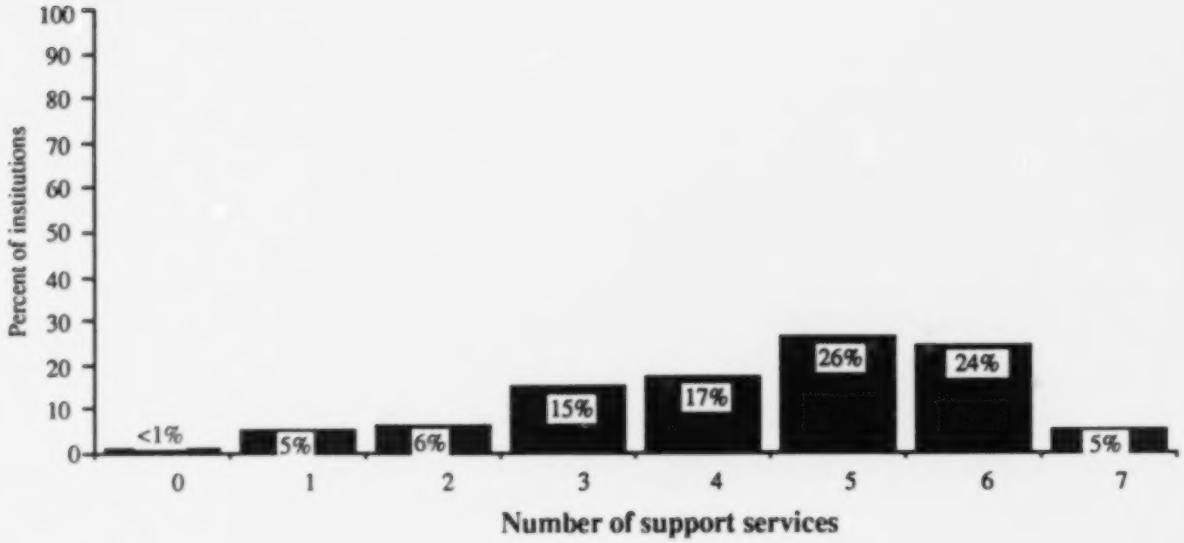


Source: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Academic Support Services

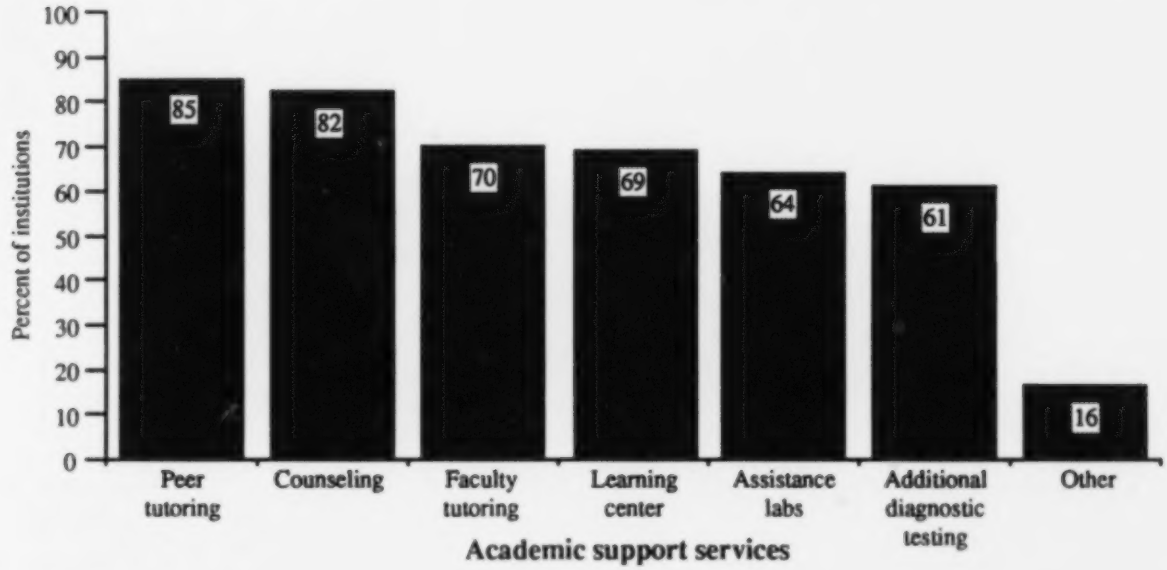
Institutions were asked to choose from a list of support services which ones they provide specifically for students needing remedial education. The list contained the following: peer tutoring, faculty tutoring, additional diagnostic testing, counseling, assistance laboratories, learning center, and other services. In fall 1989, nearly all colleges provided academic support services specifically for students needing remediation. More than half provided five or more services (figure 6); peer tutoring (85 percent) and counseling (82 percent) were the most frequently offered. Over 60 percent of colleges provided faculty tutoring, learning center, assistance labs, or additional diagnostic testing (figure 7).

Figure 6. -- Percentage of institutions providing different numbers of academic support services specifically for students needing remediation: United States, 1989-90



Source: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Figure 7.-- Percentage of institutions providing certain academic support services specifically for students needing remediation: United States, 1989-90



Source: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

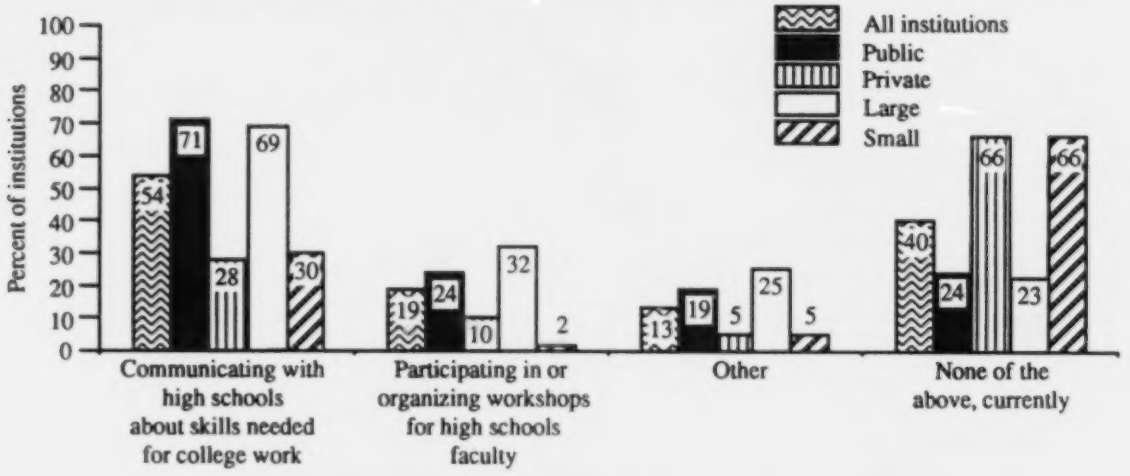
Public and medium or large institutions were more likely than private and small institutions to offer most of the academic support services (table 13). Differences were statistically significant for assistance laboratories, learning centers, additional diagnostic testing, and counseling. For example, 78 percent of public colleges provided a learning center; 76 percent, assistance labs; and 68 percent, additional diagnostic testing; while 54 percent of private colleges provided a learning center; 44 percent*, assistance labs; and 49 percent*, additional diagnostic testing.

Sixteen percent* of institutions provided other types of support services, such as text taping, word processing, computer assistance, study skills workshops, and supplemental instruction.

Reducing the Need for Remedial Education

Institutions reported on the activities they were engaged in to reduce the need for remedial education: communicating with high schools about skills needed for college work, participating in or organizing workshops for high school faculty, or other activities. Communicating with high schools about skills needed for college work was the most typical institutional activity in fall 1989, with over half of institutions participating in it (table 14). Public (71 percent) and large institutions (69 percent) were more likely than private (28 percent*) and small institutions (30 percent*) to communicate with high schools (figure 8).

Figure 8.-- Percentage of institutions engaging in certain activities to reduce the need for remedial education: United States, 1989-90



Source: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

*Standard error is greater than or equal to 10 percent of the estimate (table 19).

Nearly one-fifth* of institutions participated in organized workshops for high school faculty. Thirteen percent* engaged in other activities, such as providing programs for high school students or raising admission standards. Forty percent of institutions offering remedial courses did not engage in any activity to reduce the need for remedial education.[10]

Changes Since the 1983-84 Academic Year

Some of the items on this survey were also included in an FRSS survey of remedial education in higher education institutions conducted in 1983-84. To determine what changes have occurred over the last 6 years, items from the 1989-90 survey were compared with items from the 1983-84 survey that were asked in the same or similar manner. The 1983-84 survey asked for the "Number of separate courses (Do not count courses repeated in more than one semester or multiple sections of the same course more than once)." The 1989-90 survey asked, "What is the number of remedial/developmental courses with different catalog numbers in fall 1989? (Do not count multiple sections of the same course.)"

The 1983-84 survey found that 82 percent of institutions offered remedial courses in reading, writing, or mathematics.[11] The 1989-90 survey found the number of institutions offering remedial courses decreased to 74 percent. To substantiate this 8 percent decrease, institutions that participated in both studies were compared (slightly more than one-fifth of the institutions in the 1989-90 survey were also in the 1983-84 survey). Overall, of institutions that had participated in both samples, 7 percent fewer offered remedial courses in 1989-90 than in 1983-84.

A downward trend also appeared in the percentage of 4-year institutions offering one or more remedial course in reading, writing, or mathematics from 1983-84 (78 percent) to 1989-90 (64 percent; table 15).

This trend reappears in both remedial reading and remedial writing at 4-year institutions:

- In remedial reading, 53 percent in 1983-84 versus 41 percent in 1989-90; and

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[10]Percentages add to more than 100 because institutions may engage in multiple activities to reduce the need for remedial education.

[11]In the previous survey, standard errors were calculated only on selected items. To determine the standard errors for the remaining items, the ratios of the known standard errors from the 1983-84 survey over the corresponding standard errors from the 1989-90 survey were computed. Then the average of the ratios based on standard errors for all institutions was calculated, as was the average of the ratios based on standard errors for subsets (e.g., public, private, 2-year, 4-year, large, small) of all institutions. In the former, 1983-84 standard errors were 95 percent of 1989-90 standard errors (based on the average of 5 ratios); in the latter, 1983-84 standard errors were 63 percent of 1989-90 standard errors (based on the average of 4 ratios and ignoring 1 outlier).

*Standard error is greater than or equal to 10 percent of the estimate (table 19).

- In remedial writing, 69 percent in 1983-84 versus 53 percent in 1989-90.

The decrease in the percentage of institutions offering remedial courses was accompanied by a decrease in freshman enrollment in remedial courses. In remedial writing and remedial mathematics courses, this decrease was found for all, public, 4-year, and large institutions. In remedial reading courses, the decrease in freshman enrollment was found only in public and large institutions (table 16). For example, at large institutions freshman enrollment in remedial reading fell from 16 percent in 1983-84 to 11 percent* in 1989-90.

While participation in remedial courses may be decreasing, academic support services appear to be on the rise. For example, the number of colleges offering support services specifically for students needing remediation increased from 90 percent to nearly 100 percent.

*Standard error is greater than or equal to 10 percent of the estimate (table 19).

Survey Methodology and Reliability

The population of interest for this survey was institutions of higher education (IHEs) that serve freshmen and are accredited at the college-level by an association or agency recognized by the Secretary of Education. A national probability sample of 546 IHEs was selected from a universe of 3,283 colleges and universities. The sampling frame used for the survey was the universe file of the Higher Education General Information System (HEGIS) Fall Enrollment and Compliance Report of Institutions of Higher Education of 1983-84. Of the total initial sample of 546 institutions, 47 were determined to be out of scope, mainly because they did not have freshmen. The weighted total from the 473 responding institutions in the sample (out of the 499 eligible institutions) is 2,874, representing all colleges and universities with freshmen (table 17). The weighted total from the institutions able to report remedial figures was somewhat lower (table 18) (see discussion of item nonresponse rates below).

Questionnaires (copy included) were mailed in late April 1990. The questionnaire and cover letter addressed to an experienced survey coordinator at the institution requested that the questionnaire be completed by the person at the institution most knowledgeable about remedial/ developmental studies. Data collection and followup efforts continued through mid-July. An overall response rate of 95 percent was obtained from the eligible institutions.

The universe was stratified by type of control, type of institution, and enrollment size. Within strata, schools were selected at uniform rates, but the sampling rates varied considerably from stratum to stratum. The response data were weighted to produce national estimates and a weight adjustment was made to account for survey nonresponse. The weights were calculated for each institution inversely proportional to its square root of size. These weights ranged from 1.9636 to 24.2000. The findings in this report are estimates based on the sample selected and, consequently, are subject to sampling variability. If the questionnaire had been sent to a different sample, the responses would not have been identical; some figures might have been higher, while others might have been lower.

The standard error is a measure of the variability due to sampling when estimating statistics. It indicates the variability in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated percentage of freshmen enrolled in remedial mathematics courses at public institutions in fall 1989 is 21 percent, and the estimated standard error is 1.0. The 95 percent confidence interval for the statistic extends from 21 - (1.0 times 1.96) to 21 + (1.0 times 1.96), or from 19 to 23 percent. This means that one can be confident that this interval contains the true population parameter 95 percent of the time.

Estimates of standard errors were computed using a replication technique known as jackknife replication. The estimated standard errors for some key statistics are shown in table 19. In some cases, estimates of standard errors were relatively large because statistics were based on a small number of cases. This was true, for example, for schools designated as minority status (those with a student body less than 50 percent white). Standard errors for statistics not included in this table can be obtained from NCES upon request.

For categorical data, relationships between variables with 2 or more levels have been tested using chi-square tests at the .05 level of significance, adjusted for average design effect. If the overall chi-square test was significant, it was followed up with pair-wise tests using a Bonferroni *t* statistic, which maintained an overall 95 percent confidence level or better.

Survey estimates are also subject to errors of reporting and errors made in the collection of the data. These nonsampling errors can sometimes bias the data. While general sampling theory can be used to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and usually require that an experiment be conducted as part of the data collection procedures or the use of data external to the study.

Nonsampling errors may include such problems as differences in the respondents' interpretation of the meaning of the questions, differences related to the particular time the survey was conducted, or errors in data preparation. During the design of the survey and survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous items. The questionnaire was pretested with respondents like those who completed the survey, and the questionnaire and instructions were extensively reviewed by the National Center for Education Statistics (NCES) and a panel of specialists in remedial/developmental studies. Manual and machine editing of the questionnaires was conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone; data were keyed with 100 percent verification.

Data are presented for all institutions and by the following institutional characteristics: type (2-year and 4-year), control (public and private), geographic region (Northeast, Central, Southeast, and West), enrollment size (less than 1,000 undergraduates, 1,000 to 4,999 undergraduates, and 5,000 or more undergraduates), minority status (less than 50 percent white, and greater than or equal to 50 percent white). Some data on the percentage of institutions offering remedial courses are also presented by selectivity ratings (most difficult, very difficult, moderately difficult, minimally difficult, and noncompetitive).

Region classifications are those used by the Bureau of Economic Analysis of the U.S. Department of Commerce, the National Assessment of Educational Progress, and the National Education Association. The Northeast includes Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New

Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The Central region includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The Southeast includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. The West includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming.

Item nonresponse rates varied. Nonresponse rates for items discussed in the "Characteristics of Remedial Courses and Programs" (pages 7-15) ranged from 0.0 percent to 0.6 percent. Nonresponse rates for items on the number of teachers of remedial courses were slightly higher, ranging from 3.9 percent to 7.2 percent. As mentioned previously, the nonresponse rates for freshman enrollment and passing items were considerably higher, as some institutions were unable to provide these figures and were reluctant to give estimates. Therefore, imputations were made for the following missing freshman enrollment and passing rates:

Items requiring imputations	Number of cases imputed
Percent enrolled in remedial reading courses	55
Percent enrolled in remedial writing courses	61
Percent enrolled in remedial mathematics courses	68
Percent passing remedial reading courses	73
Percent passing remedial writing courses	79
Percent passing remedial mathematics courses	88
Percent enrolled in remedial courses in reading, writing, or mathematics	78

Imputations for the first six items were done initially. Of the 473 responding institutions, 361 offered at least one remedial program. Of these 361 schools, item imputations rates for the six items ranged from 15.2 percent to 24.4 percent.

The 94 schools requiring imputation were first broken into three classes: 52 schools needed all six variables imputed; 14 needed all three passing rates imputed, but none of the enrollment rates; and 28 needed some other combination of variables imputed. In order to minimize the impact of imputation on both averages and variances, a hot-deck imputation procedure was used, respecting the sampling stratification wherever possible. Hot-deck imputation selects a donor value from another institution with similar characteristics to use as the imputed value. Thus, the institutions were sorted by strata and within strata by total school size before beginning imputation.

Imputations were then done for the 66 schools that needed imputation for all three passing rates (and possibly all three enrollment rates). A single donor institution was selected for all missing data for a given institution, if it was the institution immediately preceding the one needing imputation, and if it contained values for all six variables. Minimizing the number of times a single institution is used as a donor minimizes the impact on variance. Therefore, if an institution had already been used as a donor, the preceding eligible institution on the list was used. If all three of the preceding potential donors had already been used, a donor institution would be used a second time. This kept the donor institution as similar in size to the imputed institution as possible.

For 12 of the remaining 28 cases needing imputation, some of the enrollment (and/or passing) data were reported. For these cases, the missing data were imputed from the other data reported by the same institution. For example, if the institution reported that 30 percent of its students were enrolled in remedial reading classes and 40 percent enrolled in remedial mathematics, but did not report the percent for writing, the average, 35 percent, was imputed for remedial writing.

This left 16 institutions needing imputation for one or two enrollment (and/or passing) variables where no data were reported for the other subjects. (In addition, one institution had one missing and one reported enrollment variable and two missing passing variables. The enrollment imputation followed the procedure outlined in the previous paragraph, and the passing variables were imputed as described in this paragraph. Thus, 17 rather than 16 schools were in this category.) These were imputed using the same hot-deck procedure described earlier.

As a result of the above procedures, three institutions were each used as donors three times and seven other institutions were each used twice.

The imputed values had a small and statistically insignificant impact on the estimated overall average percentage of students enrolled in or passing remedial classes. Comparing the pre-imputation averages with those after imputation shows that including imputed values raised the percentage enrolled by 1.4 percent for reading and writing, and 2.2 percent for mathematics. It lowered the passing rates by 0.4 percent for reading and 0.2 percent for mathematics, while raising the rate by 0.4 percent for writing.

Imputations for the last item--total percentage of freshmen enrolled in one or more remedial courses in reading, writing, or mathematics--were restricted by the values for the percentage enrolled in each of the individual subjects (remedial reading, writing, and mathematics). The minimum value for the total unduplicated percentage enrolled in remedial courses equals the largest percentage enrolled in remedial reading, writing, or mathematics. The maximum value for the total, unduplicated percentage enrolled in remedial courses equals the sum of the percentages enrolled in remedial reading, writing, or mathematics.

Because of these restrictions, it was decided to impute the midpoint between the minimum and maximum values.

The imputed values for this item had a slightly larger but still statistically insignificant impact on the estimated overall average percentage of students enrolled in one or more remedial courses. Including imputed values raised the percentage enrolled by 4.7 percent. The appropriateness of using the midpoint as the value to be imputed was confirmed by examining those cases where no values were imputed for percentages enrolled in individual remedial subjects or for the total, unduplicated percentage. For institutions without any imputations for these items, the value of the total, unduplicated percentage enrolled was 43 percent of the difference between the minimum value and the maximum value.

The survey was performed under contract with Westat, Inc., using the Fast Response Survey System (FRSS). Westat's Project Director was Elizabeth Farris, and the Survey Manager was Wendy Mansfield. Jeffrey Williams was the NCES Project Officer through data collection and followup efforts. Judi Carpenter was the NCES Project Officer during the remainder of the survey (through analysis and report writing). The data requester was MacKnight Black, Education Program Officer, Postsecondary Education Statistics Division. FRSS was designed to collect quickly, and with minimal burden on respondents, small quantities of data needed for educational planning and policy.

Acknowledgments

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Ansley Abraham, Research Associate, Southern Regional Education Board
Hunter R. Boylan, Director, National Center for Developmental Education, Appalachian State University
Nancy Carriuolo, Director of the Office of School/College Relations, the New England Association of Schools and Colleges
Kaylene A. Gebert, 1989-90 President, National Association for Developmental Education
Anthony D. Lutkus, Director, Basic Skills Assessment, Department of Higher Education, State of New Jersey
Martha Maxwell, Educational Consultant, Bethesda, Maryland
Arnold L. Mitchem, Executive Director, National Council of Educational Opportunity Associations
John R. Wittstruck , Associate Commissioner for Policy Analysis and Data Services, Missouri Coordinating Board for Higher Education

Two additional surveys on college-level remedial education were resources during survey design:

1) Survey of Remedial/Developmental Studies in Institutions of Higher Education, FRSS 19, U.S. Department of Education, National Center for Education Statistics, 1984, and

2) Survey of Remedial Education in Institutions of Higher Education in the SREB States, Southern Regional Education Board, 1989, by Ansley Abraham.

The FRSS 19 report was published in 1986. SREB will publish the first in a series of reports based on its survey in June 1991.

The report reviewers were Ansely Abraham, Southern Regional Education Board; Nancy Carriuolo, New England Association of Schools and Colleges; John R. Wittstruck, Missouri Coordinating Board for Higher Education; and Judi Carpenter, Michael Cohen, Jim Houser, Roslyn Korb, and John Sietsema, National Center for Education Statistics.

For more information about the Fast Response Survey System, contact Judi Carpenter, Office of Educational Research and Improvement, National Center for Education Statistics, 555 New Jersey Avenue, NW, Washington, DC 20208-5651, telephone (202) 219-1333. For more information about this survey, contact MacKnight Black at the same address, telephone (202) 219-1594.

Table 1. -- Percentage of institutions of higher education offering remedial courses and average number of courses offered in remedial reading, writing, and math, by institutional characteristics: United States, 1989-90

Institutional characteristic	Institutions					Average number of courses offered		
	Number with freshmen	Percent offering one or more remedial courses						
		Reading, writing, or math	Reading	Writing	Math	Reading	Writing	Math
All institutions	2,874	74	58	65	68	1.9	1.9	2.3
Control								
Public	1,420	91	82	87	89	2.5	2.4	3.0
Private	1,454	58	34	44	47	1.0	1.0	1.3
Type								
2-year	1,150	90	82	84	84	2.8	2.5	3.0
4-year	1,724	64	41	53	57	1.1	1.2	1.7
Selectivity								
Most difficult	46	27	18	22	18	(*)	(*)	(*)
Very difficult	180	32	17	24	27	(*)	(*)	(*)
Moderately difficult	1,072	62	40	53	55	1.2	1.2	1.6
Minimally difficult	486	73	44	55	62	1.1	1.3	1.4
Noncompetitive	1,091	96	89	90	91	2.7	2.5	3.1
Region								
Northeast	759	67	48	59	61	1.5	1.7	1.9
Central	825	82	62	70	74	1.8	1.8	2.2
Southeast	658	73	60	62	65	1.5	1.4	1.9
West	632	74	60	69	71	3.0	2.6	3.4
Size of institution								
Less than 1,000	918	60	35	47	48	0.9	1.0	1.2
1,000 to 4,999	1,214	78	64	69	75	1.8	1.9	2.3
5,000 or more	742	87	76	81	81	2.9	2.5	3.4
Minority status								
Minority	440	74	67	57	69	2.0	1.7	2.1
Nonminority	2,434	74	56	66	68	1.9	1.9	2.4

*Too few cases for a reliable estimate.

NOTE: Because of rounding, number of institutions with freshmen may not add to total.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 2. -- Percentage of institutions unable to provide remedial-course enrollment data for all freshmen or for freshmen by racial/ethnic group, by institutional characteristics: United States, 1989-90

Institutional characteristic	Institutions unable to provide remedial course enrollment data for all freshmen			Institutions able to provide remedial course enrollment data for all freshmen but not for racial/ethnic groups		
	Reading	Writing	Math	Reading	Writing	Math
All institutions	18	16	18	32	29	31
Control						
Public	22	21	22	29	33	33
Private	6	5	12	36	24	28
Type						
2-year	20	20	23	36	36	36
4-year	14	12	13	27	23	26
Region						
Northeast	22	15	23	42	30	38
Central	16	15	16	34	28	32
Southeast	4	5	4	24	30	25
West	30	28	29	29	30	29
Size of institution						
Less than 1,000	4	2	13	38	23	28
1,000 to 4,999	14	13	12	29	33	32
5,000 or more	30	31	31	32	30	32
Minority status						
Minority	13	16	17	36	33	30
Nonminority	19	16	18	31	29	31

NOTE: Institutions reporting remedial-course enrollment data from institutional records and from estimates were considered able to provide the data.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 3. -- Percentage of entering freshmen who enrolled in a remedial reading, writing, or math course and percentage of those enrolled who passed, by institutional characteristics: United States, 1989-90

Institutional characteristic	Number of freshmen (in thousands) in fall '89	Freshmen enrolled in remedial courses				Freshmen passing remedial courses		
		Reading, writing, or math	Reading	Writing	Math	Reading	Writing	Math
All institutions	2,242	30	13	16	21	77	73	67
Control								
Public	1,784	32	13	17	23	74	71	65
Private	457	22	12	11	12	86	83	80
Type								
2-year	1,069	36	16	20	26	73	70	65
4-year	1,173	24	9	12	15	82	77	69
Region								
Northeast	520	33	13	18	20	77	73	69
Central	670	23	10	13	19	73	72	65
Southeast	418	31	16	14	23	83	74	68
West	634	34	13	17	22	74	72	65
Size of institution								
Less than 1,000	109	26	9	15	18	84	81	79
1,000 to 4,999	650	33	16	17	22	79	74	69
5,000 or more	1,483	29	11	15	20	76	71	65
Minority status								
Minority	207	55	32	28	35	78	67	63
Nonminority	2,035	27	11	14	19	76	74	67

NOTE: Because of rounding, number of freshmen may not add to total.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 4. -- Percentage of institutions unable to provide remedial-course passing rates for all freshmen or for freshmen by racial/ethnic group, by institutional characteristics: United States, 1989-90

Institutional characteristic	Institutions unable to provide remedial-course passing rates for all freshmen			Institutions able to provide remedial-course passing rates for all freshmen but not for racial/ethnic groups		
	Reading	Writing	Math	Reading	Writing	Math
All institutions	26	23	25	36	37	40
Control						
Public	32	30	31	34	36	37
Private	11	8	14	41	38	46
Type						
2-year	30	30	32	39	40	40
4-year	19	16	18	34	35	40
Region						
Northeast	32	24	33	48	35	48
Central	20	22	24	37	38	46
Southeast	12	10	9	27	33	28
West	41	34	35	38	43	41
Size of institution						
Less than 1,000	8	5	13	43	36	43
1,000 to 4,999	22	20	20	35	42	44
5,000 or more	41	39	41	33	29	30
Minority status						
Minority	22	23	26	38	41	35
Nonminority	26	23	25	36	36	41

NOTE: Institutions reporting remedial-course passing rates from institutional records and from estimates were considered able to provide the data.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 5. -- Average number of persons teaching one or more remedial course in fall 1989, by institutional characteristics: United States, 1989-90

Institutional characteristic	Teaching remedial courses	Specifically hired for this purpose	With degree credentials specific to remedial education	Given specific training by the institution
All institutions	14.9	8.2	3.4	5.8
Control				
Public	21.9	12.4	5.0	9.3
Private	4.7	2.1	1.1	0.9
Type				
2-year	20.2	11.5	4.6	8.5
4-year	10.1	5.2	2.3	3.4
Region				
Northeast	16.4	8.5	4.6	6.0
Central	11.6	7.3	2.1	5.3
Southeast	13.3	7.2	2.9	3.8
West	19.9	10.3	4.4	8.6
Size of institution				
Less than 1,000	3.0	1.2	0.7	0.6
1,000 to 4,999	10.4	4.7	2.0	3.3
5,000 or more	33.2	20.4	8.6	15.3
Minority status				
Minority	16.6	9.4	4.7	7.6
Nonminority	14.6	8.0	3.1	5.5

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 6. Percentage of institutions with most frequent form of credit given for remedial courses in reading, writing, and math, by institutional characteristics: United States, 1989-90

Institutional characteristic	Reading				Writing				Math			
	No formal credit	Institutional credit	Degree credit, elective	Degree credit, subject	No formal credit	Institutional credit	Degree credit, elective	Degree credit, subject	No formal credit	Institutional credit	Degree credit, elective	Degree credit, subject
All institutions	12	66	19	2	10	67	18	5	11	69	15	5
Control												
Public	10	76	13	1	10	78	11	1	9	79	9	3
Private	18	43	35	4	11	45	31	13	13	51	27	9
Type												
2-year	10	76	14	1	12	78	10	1	9	79	10	3
4-year	16	54	27	3	9	55	26	10	13	60	20	7
Region												
Northeast	28	39	32	2	22	43	23	12	17	49	20	14
Central	8	64	24	3	6	62	28	5	11	66	19	4
Southeast	7	83	11	0	5	86	7	2	5	87	8	0
West	9	79	10	2	10	79	8	2	9	77	11	3
Size of institution												
Less than 1,000	8	59	34	0	6	62	23	9	9	66	17	9
1,000 to 4,999	15	71	13	2	11	70	15	4	9	73	16	3
5,000 or more	12	65	20	3	12	66	18	4	15	66	13	6
Minority status												
Minority	19	68	13	0	13	66	21	0	7	73	18	3
Nonminority	11	66	21	2	10	67	17	6	12	68	15	6

NOTE: Because of rounding percents may not add to 100.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 7. -- Percentage of institutions with most frequent requirement status for remedial courses in reading, writing, and math, by institutional characteristics: United States, 1989-90

Institutional characteristic	Requirement status								
	Reading			Writing			Math		
	Required	Recommended but not required	Voluntary	Required	Recommended but not required	Voluntary	Required	Recommended but not required	Voluntary
All institutions	54	43	3	68	29	2	63	35	2
Control									
Public	48	49	3	63	35	1	57	42	2
Private	66	31	3	78	18	4	74	24	2
Type									
2-year	45	54	1	57	42	1	51	48	1
4-year	65	29	6	80	16	4	74	23	3
Region									
Northeast	71	25	4	82	12	6	70	25	5
Central	42	54	5	64	34	2	60	39	1
Southeast	69	29	2	80	20	0	76	23	(*)
West	37	61	2	50	48	1	47	53	(*)
Size of institution									
Less than 1,000	57	43	0	75	23	2	75	23	2
1,000 to 4,999	56	43	2	66	32	2	60	38	2
5,000 or more	49	44	7	67	30	3	58	40	2
Minority status									
Minority	46	54	0	61	39	0	62	37	1
Nonminority	55	41	4	70	28	3	63	35	2

* = Less than 0.5 percent.

NOTE: Because of rounding, percents may not add to 100.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 8. -- Percentage of institutions using placement tests to select participants for remedial courses and percentage basing remedial-course exit skills on regular academic-course entry skills in reading, writing, and math, by institutional characteristics: United States, 1989-90

Institutional characteristic	Institutions using placement tests to select participants			Institutions basing remedial-course exit skills on regular academic course entry skills		
	Reading	Writing	Math	Reading	Writing	Math
All institutions	88	94	93	70	81	86
Control						
Public	92	96	95	72	82	86
Private	77	91	89	67	79	85
Type						
2-year	96	97	96	75	83	86
4-year	78	91	90	64	80	85
Region						
Northeast	86	94	90	68	81	85
Central	80	90	92	58	76	84
Southeast	96	99	95	80	86	88
West	93	96	95	79	85	86
Size of institution						
Less than 1,000	78	94	87	59	78	79
1,000 to 4,999	90	95	95	76	81	87
5,000 or more	90	92	94	69	84	88
Minority status						
Minority	91	100	100	68	85	91
Non-minority	87	93	92	70	81	85

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 9. -- Percentage of institutions letting students take any, some, or no regular academic courses while taking remedial courses in reading, writing, and math, by institutional characteristics: United States, 1989-90

Institutional characteristic	Reading			Writing			Math		
	Any regular academic courses	Some regular academic courses	No regular academic courses	Any regular academic courses	Some regular academic courses	No regular academic courses	Any regular academic courses	Some regular academic courses	No regular academic courses
All institutions	35	63	2	30	68	2	30	69	1
Control									
Public	31	69	1	29	71	(*)	27	73	0
Private	45	49	6	32	63	5	37	62	2
Type									
2-year	31	69	0	27	72	1	27	71	1
4-year	40	56	5	33	64	3	34	66	0
Region									
Northeast	29	68	3	38	60	2	37	63	0
Central	43	54	2	30	65	4	36	62	2
Southeast	29	69	2	19	81	0	16	84	0
West	35	65	0	32	68	0	30	70	0
Size of institution									
Less than 1,000	46	54	0	26	71	3	33	64	3
1,000 to 4,999	30	66	4	30	68	2	29	71	0
5,000 or more	35	64	1	33	66	1	30	70	0
Minority status									
Minority	25	75	1	22	77	1	19	81	0
Nonminority	37	60	2	31	67	2	32	67	1

* = Less than 0.5 percent.

NOTE: Because of rounding, percents may not add to 100.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 10. -- Percentage of institutions housing most frequent providers of remedial education in reading, writing, and math within various administrative units, by institutional characteristics: United States, 1989-90

Institutional characteristic	Administrative unit														
	Reading					Writing					Math				
	Separate remedial division	Traditional academic department	Counseling/ tutoring center	Learning center	Other	Separate remedial division	Traditional academic department	Counseling/ tutoring center	Learning center	Other	Separate remedial division	Traditional academic department	Counseling/ tutoring center	Learning center	Other
All institutions	26	51	2	18	3	20	65	1	13	1	19	69	1	11	1
Control															
Public	28	53	1	16	2	20	65	(*)	12	0	21	66	(*)	11	1
Private	21	47	2	23	6	18	66	2	13	2	15	74	1	11	0
Type															
2-year	28	55	1	16	1	23	63	0	14	1	25	64	0	10	1
4-year	24	46	3	21	5	16	68	2	12	2	13	74	1	11	1
Region															
Northeast	20	59	3	17	0	13	73	3	12	0	11	78	3	9	0
Central	26	36	3	29	6	21	54	1	22	2	19	61	0	20	0
Southeast	36	50	0	10	3	30	62	0	7	(*)	32	62	0	4	2
West	21	65	0	12	2	15	77	0	6	2	15	77	0	6	2
Size of institution															
Less than 1,000	24	45	0	23	8	17	67	2	14	0	17	71	0	12	0
1,000 to 4,999	22	54	2	19	2	18	63	1	15	1	17	68	1	13	1
5,000 or more	32	51	1	13	1	23	67	0	8	2	24	68	0	6	2
Minority status															
Minority	33	50	2	5	10	29	61	2	7	0	31	56	2	9	2
Nonminority	25	51	1	21	1	18	66	1	13	1	17	71	(*)	11	1

* = Less than 0.5 percent.

NOTE: Because of rounding, percents may not add to 100.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 11. -- Percentage of institutions conducting and rating first in importance certain types of evaluations of remedial programs, by institutional characteristics: United States, 1989-90

Institutional characteristic	Type of evaluation									
	Student evaluation		Instructor evaluation		Student completion rate		Followup studies of grades		Other followup studies	
	Ranking first	Conducting evaluation	Ranking first	Conducting evaluation	Ranking first	Conducting evaluation	Ranking first	Conducting evaluation	Ranking first	Conducting evaluation
All institutions	25	80	23	78	30	78	15	65	4	54
Control										
Public	25	80	25	80	31	81	14	68	3	58
Private	24	81	21	74	29	73	17	60	6	47
Type										
2-year	30	83	28	80	27	80	13	65	2	54
4-year	20	78	19	75	32	77	16	64	6	54
Region										
Northeast	17	79	36	76	26	78	10	62	7	63
Central	25	80	15	78	38	84	18	69	3	58
Southeast	26	86	17	77	26	79	24	67	1	52
West	32	77	29	79	27	70	6	59	4	40
Size of institution										
Less than 1,000	29	83	20	79	29	76	14	67	4	47
1,000 to 4,999	27	86	23	78	31	79	15	60	3	52
5,000 or more	18	71	27	76	29	79	16	70	5	62
Minority status										
Minority	15	73	22	81	47	85	11	59	4	58
Nonminority	27	82	24	77	27	77	16	66	4	53

* = Less than 0.5 percent.

NOTE: Because of rounding, percents of institutions ranking first in importance different types of evaluation may not add to 100. In addition, a sixth category of type of evaluation--"Other"--was not reported because it contained so few responses. Some rounded percents may add to fewer than 95 because of this omission. Percents of institutions conducting evaluations do not add to 100 because institutions can conduct more than one type of evaluation.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 12.--Percentage of 4-year institutions maintaining baccalaureate degree graduation rates for certain types of freshmen, by institutional characteristics: United States, 1989-90

Institutional characteristic	For all entering freshmen	By racial/ethnic group for all entering freshmen	For entering freshmen who enrolled in at least one remedial course	By racial/ethnic group for entering freshmen who enrolled in at least one remedial course
All institutions	77	40	19	13
Control				
Public	73	58	21	16
Private	81	28	17	11
Region				
Northeast	82	37	17	7
Central	78	39	17	14
Southeast	80	51	21	15
West	67	33	21	18
Size of institution				
Less than 1,000	85	26	24	11
1,000 to 4,999	75	34	17	15
5,000 or more	74	61	16	11

NOTE: Minority status is not included in this table because there were too few 4-year institutions for a reliable estimate.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 13.--Percentage of institutions providing certain academic support services specifically for students needing remediation, by institutional characteristics: United States, 1989-90

Institutional characteristic	Academic support service						
	Peer tutoring	Faculty tutoring	Additional diagnostic testing	Counseling	Assistance labs	Learning center	Other
All institutions	85	70	61	82	64	69	16
Control							
Public	87	69	68	87	76	78	17
Private	82	73	49	75	44	54	14
Type							
2-year	83	70	64	87	72	74	17
4-year	87	70	58	77	56	64	14
Region							
Northeast	85	70	50	86	65	72	16
Central	82	65	56	80	55	67	17
Southeast	84	74	62	77	69	62	11
West	90	74	78	87	69	75	17
Size of institution							
Less than 1,000	81	79	42	72	38	45	21
1,000 to 4,999	85	67	65	86	68	72	12
5,000 or more	89	67	71	86	79	85	17
Minority status							
Minority	83	72	63	82	66	73	7
Nonminority	86	70	60	82	63	68	17

NOTE: The "Other" category consists of responses written in by respondents, such as computer assistance and text taping.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 14.--Percentage of institutions engaging in certain activities to reduce the need for remedial education, by institutional characteristics: United States, 1989-90

Institutional characteristic	Activity to reduce need			
	Communicating with high schools about skills needed for college work	Participating in or organizing workshops for high school faculty	Other	None of the above, currently
All institutions	54	19	13	40
Control				
Public	71	24	19	24
Private	28	10	5	66
Type				
2-year	62	17	13	34
4-year	47	20	14	46
Region				
Northeast	46	24	16	42
Central	49	16	12	48
Southeast	66	17	10	32
West	59	18	16	37
Size of institution				
Less than 1,000	30	2	5	66
1,000 to 4,999	58	19	10	38
5,000 or more	69	32	25	23
Minority status				
Minority	56	14	14	42
Nonminority	54	19	13	40

NOTE: The "Other" category consists of responses written in by respondents, such as raising admissions standards and providing programs for high school students.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 15.--Percentage of institutions offering remedial courses in reading, writing, and math, by institutional characteristics: United States, 1983-84 and 1989-90

Institutional characteristic	Remedial courses		Remedial reading		Remedial writing		Remedial math	
	1989-90	1983-84	1989-90	1983-84	1989-90	1983-84	1989-90	1983-84
All institutions	74	82	58	66	65	73	68	71
Control								
Public	91	94	82	87	87	89	89	88
Private	58	70	34	44	44	56	47	53
Type								
2-year	90	88	82	80	84	78	84	82
4-year	64	78	41	53	53	69	57	61
Size of institution								
Less than 1,000	60	69	76	83	47	55	48	50
1,000 to 4,999	78	84	64	69	69	78	75	76
5,000 or more	87	94	76	83	81	86	81	87

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990), and College Level Remediation, FRSS 19, U.S. Department of Education, National Center for Education Statistics, 1986 (survey conducted in 1984).

Table 16.--Percentage of freshmen enrolling in remedial courses in reading, writing, and math, by institutional characteristics: United States, 1983-84 and 1989-90

Institutional characteristic	Remedial reading		Remedial writing		Remedial math	
	1989-90	1983-84	1989-90	1983-84	1989-90	1983-84
All institutions	13	16	16	21	21	25
Control						
Public	13	18	17	22	23	27
Private	12	9	11	12	12	15
Type						
2-year	16	19	20	23	26	28
4-year	9	12	12	17	15	19
Size of institution						
Less than 1,000	9	14	15	16	18	19
1,000 to 4,999	16	18	17	22	22	26
5,000 or more	11	16	15	21	20	25

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990), and College Level Remediation, FRSS 19, U.S. Department of Education, National Center for Education Statistics, 1986 (survey conducted in 1984).

Table 17.--Number and percentage of institutions included in the study sample and the universe, by institutional characteristics: United States, 1989-90

Institutional characteristic	Respondents		Universe*	
	Number	Percent	Number	Percent
All institutions	473	100	2,874	100
Control				
Public	287	61	1,420	49
Private	186	39	1,454	51
Type				
2-year	139	29	1,150	40
4-year	334	71	1,724	60
Selectivity				
Most difficult	15	3	46	2
Very difficult	45	10	180	6
Moderately difficult	211	45	1,072	37
Minimally difficult	59	12	486	17
Noncompetitive	143	30	1,091	38
Region				
Northeast	130	27	759	26
Central	126	27	825	29
Southeast	102	22	658	23
West	115	24	632	22
Size of institution				
Less than 1,000	81	17	918	32
1,000 to 4,999	164	35	1,214	42
5,000 or more	228	48	742	26
Minority status				
Minority	61	13	440	15
Nonminority	412	87	2,434	85

*Data presented in all tables are weighted to produce national estimates. The sample was selected with probabilities proportionate to the square root of enrollment. Institutions with larger enrollments have higher probabilities of inclusion and lower weights.

NOTE: Because of rounding, number of institutions in universe may not add to total.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 18.--Number and percentage of institutions included in the study sample and the universe that reported the number of freshmen enrolled in a remedial/developmental reading course, by institutional characteristics: United States, 1989-90

Institutional characteristic	Respondents		Universe	
	Number	Percent	Number	Percent
All institutions	223	100	1,366	100
Control				
Public	165	74	899	66
Private	58	26	467	34
Type				
2-year	89	40	755	55
4-year	134	60	611	45
Region				
Northeast	54	24	288	21
Central	66	30	431	32
Southeast	58	26	377	28
West	45	20	269	20
Size of institution				
Less than 1,000	29	13	307	22
1,000 - 4,999	80	36	665	49
5,000 or more	114	51	393	29
Minority				
Minority	33	15	259	19
Nonminority	190	85	1,107	81

NOTE: Because of rounding, percent of institutions in universe may not add to 100. Because of rounding, number of institutions in universe may not add to total.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

Table 19.--Standard errors of selected items

Institutional characteristic	Percent of institutions offering remedial reading, writing, or math courses		Percent of institutions offering remedial math courses		Average number of remedial math courses offered		Percent of freshmen enrolled in remedial courses in reading, writing, or math		Percent of freshmen enrolled in remedial math courses	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
All institutions	74	2.1	68	2.2	2.3	0.11	30	1.4	21	1.0
Control										
Public	91	1.4	89	1.5	3.0	0.17	32	1.3	23	1.0
Private	58	3.8	47	4.1	1.3	0.13	22	4.2	12	2.2
Type										
2-year	90	2.5	84	2.9	3.0	0.22	36	2.1	26	1.6
4-year	64	3.0	57	2.7	1.7	0.09	24	1.9	15	1.1
Selectivity										
Most difficult	27	11.3	18	13.9	2.3	1.62	(*)	(*)	(*)	(*)
Very difficult	32	7.7	27	6.7	1.6	0.28	(*)	(*)	(*)	(*)
Moderately difficult	62	4.0	55	3.7	1.6	0.13	(*)	(*)	(*)	(*)
Minimally difficult	73	6.8	62	8.1	1.4	0.16	(*)	(*)	(*)	(*)
Noncompetitive	96	1.7	91	2.7	3.1	0.24	(*)	(*)	(*)	(*)
Region										
Northeast	67	5.1	61	5.4	1.9	0.20	33	3.0	20	2.0
Central	82	4.4	74	4.4	2.2	0.23	23	2.6	19	2.5
Southeast	73	4.8	65	3.5	1.9	0.21	31	3.1	23	2.4
West	74	5.3	71	5.3	3.4	0.40	34	2.4	22	1.7
Size of institution										
Less than 1,000	60	5.0	48	5.6	1.2	0.10	26	3.9	18	3.7
1,000 to 4,999	78	2.7	75	2.9	2.3	0.13	33	2.4	22	2.1
5,000 or more	87	2.3	81	3.0	3.4	0.30	29	1.8	20	1.3
Minority status										
Minority	74	6.8	69	7.6	2.1	0.26	55	4.0	35	4.5
Nonminority	74	2.0	68	2.5	2.4	0.12	27	1.6	19	1.1

Table 19.--Standard errors of selected items--Continued

Institutional characteristic	Percent of freshmen passing remedial math courses		Percent of institutions unable to provide remedial reading course enrollment data for all freshmen		Percent of institutions providing remedial reading course enrollment data for all freshmen but not for racial/ethnic groups		Average number of persons teaching one or more remedial courses		Percent of institutions giving institutional credit for remedial courses in math	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
All institutions	67	1.3	18	2.6	32	3.7	14.9	.78	69	2.7
Control										
Public	65	1.4	22	3.7	29	4.4	21.9	1.04	79	2.8
Private	80	4.4	6	2.9	36	6.5	4.7	0.44	51	5.7
Type										
2-year	65	1.3	20	4.3	36	5.8	20.2	1.28	79	3.3
4-year	69	2.6	14	2.5	27	3.9	10.1	0.70	60	4.0
Region										
Northeast	69	3.5	22	5.8	42	8.1	16.4	2.07	49	8.1
Central	65	1.9	16	5.3	34	8.9	11.6	1.83	66	5.6
Southeast	68	4.0	4	1.9	24	7.3	13.3	1.65	87	4.2
West	65	2.1	30	6.9	29	8.0	19.9	2.74	77	4.8
Size of institution										
Less than 1,000	79	4.4	4	3.7	38	9.2	3.0	0.25	66	8.1
1,000 to 4,999	69	1.9	14	3.9	29	5.2	10.4	0.90	73	3.8
5,000 or more	65	1.9	30	4.6	32	5.7	33.2	1.93	66	4.3
Minority status										
Minority	63	4.8	13	5.4	36	9.8	16.6	3.53	73	7.0
Nonminority	67	1.2	19	2.9	31	3.8	14.6	0.81	68	2.9

Table 19.--Standard errors of selected items--Continued

Institutional characteristic	Percent of institutions requiring students needing remediation to take remedial courses in math		Percent of institutions using placement tests to select participants for remedial courses in writing		Percent of institutions basing remedial math course exit skills on regular academic course entry skills		Percent of institutions letting students take some regular academic courses while taking remedial courses in math		Percent of institutions providing peer tutoring specifically for students needing remediation	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
All institutions	63	2.4	94	1.4	86	2.2	69	2.8	85	2.3
Control										
Public	57	3.3	96	1.0	86	2.5	73	2.1	87	2.2
Private	74	5.8	91	3.0	85	3.9	62	5.7	82	5.0
Type										
2-year	51	4.1	97	1.1	86	3.1	71	3.5	83	3.9
4-year	74	3.4	91	2.3	85	2.8	66	3.7	87	3.1
Region										
Northeast	70	6.2	94	2.6	85	3.7	63	6.7	85	3.8
Central	60	5.7	90	2.5	84	4.2	62	5.2	82	4.9
Southeast	76	6.3	99	0.6	88	4.5	84	4.8	84	4.4
West	47	5.6	96	2.2	86	4.3	70	4.8	90	3.0
Size of institution										
Less than 1,000	75	7.5	94	3.1	79	5.3	64	7.7	81	6.2
1,000 to 4,999	60	4.7	95	1.8	87	2.8	71	4.4	85	3.5
5,000 or more	58	4.1	92	1.9	88	2.6	70	3.5	89	2.6
Minority status										
Minority	62	6.8	100	0.0	91	4.8	81	6.5	83	8.1
Nonminority	63	3.0	93	1.6	85	2.3	67	3.3	86	2.7

Table 19.--Standard errors of selected items--Continued

Institutional characteristic	Percent of institutions conducting student evaluations of remedial programs		Percent of institutions ranking first in importance student evaluations of remedial programs		Percent of institutions communicating with high schools about skills needed for college work		Percent of institutions maintaining baccalaureate degree graduation rates for entering freshmen who enrolled in at least one remedial course	
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
All institutions	80	2.1	25	2.6	54	3.1	19	3.1
Control								
Public	80	2.3	25	3.6	71	3.7	21	3.9
Private	81	4.0	24	4.0	28	4.3	17	4.5
Type								
2-year	83	2.9	30	4.6	62	4.8	–	–
4-year	78	3.4	20	3.0	47	4.0	–	–
Region								
Northeast	79	5.3	17	3.6	46	5.7	17	8.5
Central	80	4.8	25	3.6	49	5.5	17	5.3
Southeast	86	4.0	26	6.0	66	6.0	21	4.9
West	77	4.2	32	6.5	59	7.2	21	7.7
Size of institution								
Less than 1,000	83	5.5	29	6.2	30	6.2	24	7.8
1,000 to 4,999	86	2.7	27	3.5	58	4.2	17	4.7
5,000 or more	71	3.3	18	3.2	69	4.0	16	3.5
Minority status								
Minority	73	9.1	15	4.9	56	9.4	26	9.3
Non-minority	82	2.4	27	2.8	54	3.4	17	3.5

*Too few cases for a reliable estimate.

–Not applicable. This question was asked only of 4-year institutions; comparisons between 2- and 4-year schools were, therefore, not computed.

SOURCE: Fast Response Survey System, College-Level Remedial Education in the Fall of 1989, FRSS 38, U.S. Department of Education, National Center for Education Statistics, 1991 (survey conducted in 1990).

FAST RESPONSE SURVEY SYSTEM

U.S. DEPARTMENT OF EDUCATION
NATIONAL CENTER FOR EDUCATION STATISTICS
WASHINGTON, D.C. 20208-5651

Form approved
OMB No. 1850-0649
App. Exp. 6/91

SURVEY OF REMEDIAL/DEVELOPMENTAL STUDIES IN INSTITUTIONS OF HIGHER EDUCATION

This report is authorized by law (20 U.S.C. 1221e-1). While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

Definition of Remedial/Developmental Studies for Purposes of this Study:

Program, course, or other activity (in the area of reading, writing, or math) for students lacking those skills necessary to perform college level work at the level required by your institution. Throughout this questionnaire these activities are referred to as "remedial/developmental"; however, your institution may use other names such as "compensatory," "basic skills," or some other term. Please answer the survey for any activities meeting the definition above, regardless of name; however, do not include English as a second language when taught primarily to foreign students.

Please answer for your regular undergraduate programs and use data from your institutional records whenever possible. If exact data are not available, then give your best estimate.

Does your institution offer any remedial/developmental courses? _____ Yes _____ No

If no, please complete section below and mail to the address on back of the survey.

Person completing this form: Name_____ Title_____

Institution_____ State_____ Phone (____)_____

NCES Form No. 2379-38, 4/90

1. Enter information requested in Parts a-f for remedial/developmental courses in each subject area in fall 1989. For those subjects (reading, writing, or math) in which you have no remedial courses, enter "0" in Part a and skip Parts b-f.

Remedial/developmental course information	Reading	Writing	Math
a. What is the number of remedial/developmental courses with different catalog numbers in fall 1989? (Do not count multiple sections of the same course.)			
b. What is the most frequent type of credit earned from remedial/developmental courses? (enter one) 1 = No formal credit 2 = Institutional credit, does not meet subject or graduation requirements 3 = Degree credit, elective only 4 = Degree credit, meets subject requirements			
c. What is the most frequent type of course requirement status for students needing remedial/developmental courses? Courses are: (enter one) 1 = Required; 2 = Recommended but not required; 3 = Voluntary			
d1. Are placement tests used to select participants? (enter yes or no)			
d2. While students are taking remedial/developmental courses, can they take: (enter one) 1 = Any regular academic courses? 2 = Some regular academic courses? 3 = No regular academic courses?			
e. Who most often provides remedial/developmental education? (enter one) 1 = Separate remedial division/department 2 = Traditional academic department(s) 3 = Counseling/tutoring center 4 = Learning Center 5 = Other (specify)			
f. Are the exit skills provided by remedial/developmental courses based on the entry skills required by the regular academic courses? (enter yes or no)			

2. Rank in order of importance the principal types of evaluation of remedial/developmental programs that your institution conducts. (1 = most important; 2 = second most important, etc., for all that apply)

_____ a. Student evaluation of course or program
_____ b. Instructor evaluation of course or program
_____ c. Student completion rate or grade for course or program
_____ d. Followup studies of grades at the next level of courses
_____ e. Other followup studies of students' academic performance
_____ f. Other (specify)_____

3a. How many persons (unduplicated head count) taught one or more remedial/developmental courses in fall 1989?_____
Of these, how many: b. Were specifically hired for this purpose? _____
c. Had degree credentials specific to remedial education? _____
d. Were given specific training by your institution for teaching remedial/developmental courses?___

4. Which of the following academic support services does your institution provide specifically for students needing remediation? (check all that apply)

_____ a. Peer tutoring
_____ b. Faculty tutoring
_____ c. Additional diagnostic testing
_____ d. Counseling
_____ e. Assistance labs
_____ f. Learning Center
_____ g. Other (specify)_____

5. What is your institution doing to reduce the need for remedial/developmental education? (check all that apply)

_____ a. Communicating with high schools about skills needed for college work
_____ b. Participating in or organizing workshops for high school faculty
_____ c. Other (specify)_____
_____ d. None of the above, currently

6a. For each racial/ethnic group, what percent of entering freshmen enrolled in one or more remedial/developmental courses in fall 1989? (Give unduplicated counts of students within each subject.)

	Reading	Writing	Math
1. All freshmen (all racial/ ethnic groups combined)?	_____	_____	_____
2. Black, non-Hispanic?	_____	_____	_____
3. White, non-Hispanic?	_____	_____	_____
4. Hispanic?	_____	_____	_____
5. Asian/Pacific Islander?	_____	_____	_____
6. American Indian/Alaskan Native?	_____	_____	_____

6b. Are the numbers of all freshmen (all groups combined) in Q6a: ☐ From institutional records? OR ☐ Estimates?

6c. Are the numbers by race/ethnicity in Q6a (2 through 6): ☐ From institutional records? OR ☐ Estimates?

7a. For each racial/ethnic group, what percent of entering freshmen in Q6a passed or successfully completed one or more remedial/developmental courses in fall 1989? (Give unduplicated counts of students within each subject.)

	Reading	Writing	Math
1. All freshmen (all racial/ ethnic groups combined)?	_____	_____	_____
2. Black, non-Hispanic?	_____	_____	_____
3. White, non-Hispanic?	_____	_____	_____
4. Hispanic?	_____	_____	_____
5. Asian/Pacific Islander?	_____	_____	_____
6. American Indian/Alaskan Native?	_____	_____	_____

7b. Are the numbers of all freshmen (all groups combined) in Q7a: ☐ From institutional records? OR ☐ Estimates?

7c. Are the numbers by race/ethnicity in Q7a (2 through 6): ☐ From institutional records? OR ☐ Estimates?

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8. Give the total, unduplicated percent of entering freshman who enrolled in one or more of the above remedial/developmental courses in fall 1989. _____

9a. For each racial/ethnic group in Columns 1 and II, what percent of 1988-89 full-time entering freshmen continued at your institution to the start of their second year (1989-90)?

Calculate percent for each racial/ethnic group separately	Column I: Of all 88-89 full-time entering freshmen within each racial/ ethnic group	Column II: Of 88-89 full-time entering freshmen who enrolled in at least one remedial/ developmental course within each racial/ethnic group
1. All freshmen (all racial/ethnic groups combined)?	_____%	_____%
2. Black, non-Hispanic?	_____%	_____%
3. White, non-Hispanic?	_____%	_____%
4. Hispanic?	_____%	_____%
5. Asian/Pacific Islander?	_____%	_____%
6. American Indian/Alaskan Native?	_____%	_____%

9b. Is the percent of all freshmen (all groups combined) in Column II: ☐ From institutional records? OR ☐ Estimates?

9c. Are the percents of freshmen in each racial/ethnic group in Column II: ☐ From institutional records? OR ☐ Estimates?

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10. **FOR 4-YEAR SCHOOLS ONLY:** Does your institution maintain baccalaureate degree graduation rates:

a.	For all entering freshmen?	_____ Yes	_____ No
b.	By racial/ethnic group for all entering freshmen?	_____ Yes	_____ No
c.	For entering freshmen who enrolled in at least one remedial/ developmental course?	_____ Yes	_____ No
d.	By racial/ethnic group for entering freshmen who enrolled in at least one remedial/developmental course?	_____ Yes	_____ No

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Please return this survey by May 11 in the accompanying envelope to:

Westat, Inc.
1650 Research Boulevard, Room 163
Rockville, MD 20850

Attention: Mansfield/928022

Thank you for your participation.

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